

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, P.O. Box 2327, Arlington, VA, on April 12, 2002.

By Connie M. Caron
Connie M. Caron

1638
#3
APR 19 2002
TECH CENTER 1600/2900

RECEIVED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

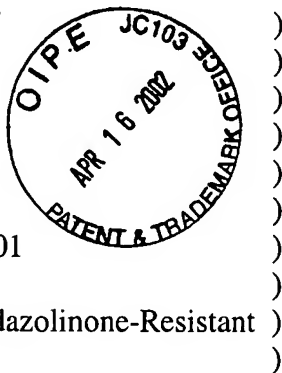
In re the Application of

Georg JANDER et al

Serial No. 10/004,827

Filed: December 7, 2001

For: Plants with Imidazolinone-Resistant
ALS



)
) Examiner: To be Assigned

)
) Art Unit: To be Assigned

)
) Atty. Docket: 38-10(15820)B

Information Disclosure Statement

Assistant Commissioner for Patents
P.O. Box 2327
Arlington, VA 22202

Sir:

The attention of the Examiner is invited to the documents listed on the attached Form PTO-1449. Copies of the listed documents are attached.

It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the reference be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

Certification and/or fee

Because this Information Disclosure Statement is being submitted prior to issuance of the first action on the merits of the above-captioned application, no certification or fee is required.

Respectfully submitted,

Connie M. Caron
Connie M. Caron
Agent for Applicants
Reg. No. 48,131

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Sheet	1	of	3
-------	---	----	---

Application Number	10/004,827
Filing Date	December 7, 2001
First Named Inventor	Georg Jander
Group Art Unit	
Examiner Name	
Attorney Docket Number	38-10(15820)B

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner
Signature

Date	
Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

APR 16 2002

PTO/SB/08B (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

Complete if Known

Application Number	10/004,827
Filing Date	December 7, 2001
First Named Inventor	Georg Jander
Group Art Unit	
Examiner Name	
Attorney Docket Number	38-10(15820)B

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		G. W. HAUGHN et al. "A Mutation Causing imidizolinone Resistance Maps to the Csr1 Locus of Arabidopsis thaliana" Plant Physiology, 92:1081-1085 (1990)
		B. J. MAZUR et al. "Isolation and Characterization of Plant Genes Coding for Acetolactate Synthase, the Target Enzyme for Two Classes of Herbicides" Plant Physiology, 85:1110-1117 (1987)
		G. W. HAUGHN et al. "Sulfonylurea-resistant mutants of Arabidopsis thaliana" Mol Gen Genet 204:430-434 (1986)
		B. J. MAZUR et al. "Transformation with a mutant Arabidopsis acetolactate synthase gene renders tobacco resistant to sulfonylurea herbicides" Mol Gen Genet 211:266-271 (1988)
		S. R. BAERSON et al. "Comparison of frequencies of individuals resistant to imazethapyr, chlorsulfuron, and glyphosate in EMS-mutagenized populations of Arabidopsis thaliana (cv. Col-0). Proceedings, 10th International Conference on Arabidopsis Research, July 4-8 1999, Melbourne, pp 5-7.
		P. BOUTSALIS et al. "Molecular basis of resistance to acetolactate synthesis-inhibiting herbicides in Sisymbrium orientale and Brassica tournefortii" Pesticide Science 55:507-516 (1999)
		P. BERNASCONI et al. "A Naturally Occurring Point Mutation Confers Broad Range Tolerance to Herbicides That Target Acetolactate Synthesis" J Biol Chem 270:17381-17385 (1995)
		K. RAJASEKARAN et al. "Selection and Characterization of Mutant Cotton (Gossypium hirsutum L.) Cell Lines Resistant to Sulphonylurea and Imidazolinone Herbicides" Plant Science 119:115-124 (1996)
		A. K. CHANG et al. "Herbicide-resistant forms of Arabidopsis thaliana acetohydroxyacid synthase: characterization of the catalytic properties and sensitivity to inhibitors of four defined mutants" Biochem J 333:765-777 (1998)
		T. R. WRIGHT et al. "Corn (Zea mays) acetolactate synthase sensitivity to four classes of ALS-inhibiting herbicides" Weed Science 46:8-12 (1998)
		G. MOURAD et al. "A double mutant allele, csr1-4, of Arabidopsis thaliana encodes an acetolactate synthase with altered kinetics" Planta 196:64-68 (1995)

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 3

Complete if Known

Application Number	10/004,827
Filing Date	December 7, 2001
First Named Inventor	Georg Jander
Group Art Unit	
Examiner Name	
Attorney Docket Number	38-10(15820)B

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		J. HATTORI et al. "Multiple resistance to sulfonylureas and imidazolinones conferred by an acetohydroxyacid synthase gene with separate mutations for selective resistance" Mol Gen Genet 232:167-173 (1992)
		P. C. Anderson et al. "Herbicide-tolerant mutants of corn" Genome 31:994-999 (1989)
		M R TAREGYAN et al. "Selection for resistance to the herbicide imazethapyr in somaclones of soyabean" Weed Research 41:143-154 (2001)
		C-K CHONG et al. "Amino Acid Residues Conferring Herbicide Tolerance in Tobacco Acetolactate Synthase" Biochemical and Biophysical Research Communications 279:462-467 (2000)
		K-H OTT et al. "Rational Molecular Design and Genetic Engineering of Herbicide Resistant Crops by Structure Modeling and Site-directed Mutagenesis of Acetohydroxyacid Synthase" J Mol Biol 263:359-368 (1996)
		C. T. HARMS et al. "Genetic and biochemical characterization of corn inbred lines tolerant to the sulfonylurea herbicide primisulfuron" Theor Appl Genet 80:353-358 (1990)
		K. NEWHOUSE et al. "Mutations in corn (Zea mays L.) conferring resistance to imidazolinone herbicides" Theor Appl Genet 83:65-70 (1991)
		L. L. SAARI et al. "Mechanism of Sulfonylurea Herbicide Resistance in the Broadleaf Weed, Kochia scoparia" Plant Physiol. 93:55-61 (1990)
		P. K. SAXENA et al. "Lack of Cross-Resistance of Imidazolinone-Resistant Cell Lines of Datura innoxia P. Mill. to Chlorsulfuron" Plant Physiol 94:1111-1115 (1990)
		M. V. SUBRAMANIAN et al. "Acetolactate Synthase Inhibiting Herbicides Bind to the Regulatory Site" Plant Physiol 96:310-313 (1991)

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.